

REMARKS

In the last Office Action, the Examiner indicated that the phrase "the face" in claims 46, 74, and 93 lacks antecedent basis; rejected claims 31-33, 35, 37, 42, 44-51, 58-61, 63, 65, 70, 72-77, 79-82, 84, 89, and 91-96 under 35 U.S.C. § 102(b) as being anticipated by Pieper et al. (U.S. Patent No. 5,391,298); rejected claims 39-41, 67-69, 78, and 86-88 under 35 U.S.C. § 103(a) as being unpatentable over Pieper et al.; and indicated that claims 34, 36, 38, 43, 52-57, 62, 64, 66, 71, 83, 85, and 90 would be allowable if rewritten in independent form.

As a preliminary matter, Applicants note that the Office Action Summary dated September 11, 2003, indicates that a copy of the Information Disclosure Statement - PTO Form 1449, filed on February 25, 2002 (i.e., paper no. 2) was attached to the Office Action. In the copy of the Office Action received by Applicants, however, no copy of the PTO Form 1449 was included. Applicants therefore request that the Examiner send Applicants an initialed copy of the PTO Form 1449 filed February 25, 2002, via facsimile at 202-408-4400 or along with the next official communication.

In response to the Examiner's indication that the phrase "the face" found in claims 46, 74, and 93 lacks antecedent basis, Applicants respectfully maintain that these claims are clear and definite. Nevertheless, Applicants have amended claims 46, 74 and 93 changing the phrase "the face" to --a face--.

Applicants respectfully traverse the rejection of claims 31-33, 35, 37, 42, 44-51, 58-61, 63, 65, 70, 72-77, 79-82, 84, 89, and 91-96 under 35 U.S.C. § 102(b) as being anticipated by Pieper et al. Applicants respectfully note that independent claim 78 was

not rejected under Section 102(b) as anticipated by Pieper et al. Rather, claim 78 was included in a Section 103(a) rejection based on Pieper et al. and, as the Examiner indicated in the Office Action, Pieper et al. fails to disclose every element of independent claim 78. (Office Action, ¶ 6.) Accordingly, because Pieper et al. fails to disclose every element of independent claim 78, Pieper et al. necessarily fails to disclose every element of claims 79-82, 84, 89, and 91-96, which ultimately depend from independent claim 78. Therefore, the Section 102(b) rejection with respect to claims 79-82, 84, 89, and 91-96 is improper and should be withdrawn.

By this Amendment, Applicants have amended several of the claims to further recite aspects of Applicants' invention. For example, independent claims 31 and 58 recite a combination of elements including, among other things, a passive sampling device for monitoring over a period of time micropollutants in an aquatic environment. Further, independent claim 50 recites, among other things, a passive sampling method for monitoring over a period of time the concentrations of micropollutants in a polluted environment. Pieper et al. fails to disclose at least the claimed passive sampling device and passive sampling method.

In contrast to the passive sampling device and method of the presently claimed invention, Pieper et al. discloses a pressurized system that operates as a filter and measures a pollutant level in a fluid delivered only periodically to a monitoring apparatus. Specifically, for each periodic measurement made by the Pieper et al. device, there is forced movement of an aquatic medium through a membrane. As a result, the Pieper et al. device extracts substantially all of the pollutants from a fluid stream and provides a pollutant level measurement that corresponds only to the

pollutant levels present at a particular instant in time. The Pieper et al. device does not provide a time-averaged measurement of the pollutant levels in the fluid stream.

Unlike the Pieper et al. device, the presently claimed invention operates as a passive sampling device. For example, the presently claimed invention does not include a pressurized system, as in Pieper et al., where the aquatic medium is forced through a membrane. Rather, the presently claimed invention operates based on diffusion of pollutants through a diffusion-limiting membrane. Specifically, the function of the receiving phase is to retain the pollutants that diffuse through the diffusion-limiting membrane and to maintain the pollutant concentration close to zero at the inner face of the diffusion-limiting membrane so that the rate of accumulation is determined only by the properties of the diffusion-limiting membrane and the external concentration of the pollutant. In this way, the claimed invention acts as a passive sampler that provides a time-averaged measurement of pollutant levels.

Because Pieper et al. fails to disclose at least a passive sampling device and a passive sampling method for monitoring pollutant levels, as presently claimed, the Section 102(b) rejection of independent claims 31, 50, and 58, as well as dependent claims 32, 33, 35, 37, 42, 44-49, 51, 59-61, 63, 65, 70, 72-77, 79-82, 84, 89, and 91-96 should be withdrawn.

Applicants also respectfully traverse the rejection of claims 39-41, 67-69, 78, and 86-88 under 35 U.S.C. § 103(a) as being unpatentable over Pieper et al. No *prima facie* case of obviousness has been established with respect to these claims for at least the reason that Pieper et al. fails to disclose or suggest every claim element. For example, Pieper et al. fails to disclose or suggest a passive sampling device, as included in

independent claim 31 (upon which claims 39-41 ultimately depend), independent claim 58 (upon which claims 67-69 ultimately depend), and independent claim 78 (upon which claims 86-88 ultimately depend). Accordingly, Applicants respectfully submit that the Section 103(a) rejection of claims 39-41, 67-69, 78, and 86-88 should be withdrawn.

Applicants wish to thank the Examiner for the indication of allowable subject matter in each of claims 34, 36, 38, 43, 52-57, 62, 64, 66, 71, 83, 85, and 90. By this Amendment, Applicants have rewritten original claims 34, 36, 38, 43, 52-57, 62, 64, 66, 71, 83, 85, and 90 in independent form as new claims 97-113. Therefore, Applicants respectfully submit that newly added claims 97-113 are in immediate condition for allowance.

In view of the foregoing, Applicants respectfully request reconsideration and reexamination of the application and timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: February 9, 2004

By:



Darren M. Jiron, Esq.  
Reg. No. 45,777

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com